# Protecting and Restoring Coral Reefs



oral reefs, located in both the Atlantic and Pacific oceans, are among the most biologically productive and diverse ecosystems in the world. They are home to over 25% of all marine life and support about 4,000 fish species. This diversity sustains tourism and fishing industries that provide billions of dollars in economic activity.



As a coastal steward, the National Oceanic and Atmospheric Administration (NOAA) has a variety of responsibilities to protect and conserve coral reefs.

NOAA's Office of Response and Restoration has a broad range of experience and capabilities that support NOAA's fulfillment of these responsibilities.

In FY2000, NOAA received funding specifically designated for coral reefs—\$6 million—to implement activities that improve the protection and conservation of coral reef ecosystems. The Office of Response and Restoration (OR&R) manages these funds, which are distributed throughout NOAA to support coral reef monitoring, mapping, management and education activities. These activities will help fulfill several of the key actions identified in the U.S. Coral Reef Task Force National Action Plan to Conserve Coral Reefs.

In FY2000, OR&R received approximately \$2 million to improve coral conservation. OR&R is reducing the adverse impacts of human activities on coral reefs by:

### **Reducing Vessel Impacts**

Hundreds of vessels strike U.S. coral reefs each year. In the Florida Keys alone, approximately 500 small vessel groundings occur each year, injuring coral reefs and surrounding seagrass beds. OR&R is working to improve the understanding of why and where vessel groundings occur so that effective measures can be developed to prevent future groundings in high risk areas. OR&R, in partnership with other NOAA programs, is developing a vessel grounding database in the Florida Keys National Marine Sanctuary.

#### Strengthening damage assessment capabilities

OR&R is strengthening damage assessment capabilities to ensure that when vessel groundings occur, damage is minimized and recovery is expedited. OR&R is developing standard damage assessment protocols for injury to coral reef ecosystems, completing the development of assessment tools for small seagrass grounding cases associated with coral reefs, and conducting training for government and nongovernment partners on how to use these important tools.

## Reducing the impacts of pollution

OR&R is improving local capacity to prepare for and respond to oil and chemical spills threatening coral environments. OR&R is developing guidelines, providing training, and developing and disseminating tools, including oil trajectory modeling tools and Environmental Sensitivity Index maps.

#### Restoring coral reefs in American Samoa

OR&R is continuing to work with other NOAA programs, the U.S Coast Guard, the Government of American Samoa and other natural resource trustees to restore reef flats in Pago Pago Harbor, American Samoa. These reefs were injured after nine longline fishing vessels came aground during a 1991

hurricane.

